



FAG

QJ309-XL-TVP

Four-point contact bearing

Four point contact bearing QJ3..-XL-TVP, X-life, plastic cage

X-life

Technical information



Your current product variant

Tolerance class	PN	Normal (ISO 492:2023)
Cage	TVP	Solid cage made of glass-fiber reinforced polyamid PA66
Dimensional / heat stabilization	S0	Rings dimensional stabilized up to 150°
Axial internal clearance	CN	Group N (CN)

Main Dimensions & Performance Data

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
C_r	107,000 N	Basic dynamic load rating, radial
C_{0r}	83,000 N	Basic static load rating, radial
C_{ur}	6,200 N	Fatigue load limit, radial
n_G	9,100 1/min	Limiting speed
n_{gr}	5,700 1/min	Reference speed
$\approx m$	0.899 kg	Weight

Mounting dimensions

$d_{a \min}$	54 mm	Minimum diameter shaft shoulder
$D_{a \max}$	91 mm	Maximum diameter of housing shoulder
$r_{a \max}$	1.5 mm	Maximum fillet radius



Dimensions

r_{\min}	1.5 mm	Minimum chamfer dimension
D_1	81.65 mm	Shoulder diameter outer ring
d_1	63.35 mm	Shoulder diameter inner ring
a	50.8 mm	Distance between the apexes of the pressure cones
α	35 °	Contact angle

Temperature range

T_{\min}	-30 °C	Operating temperature min.
T_{\max}	120 °C	Operating temperature max.

Characteristics

-  Radial load
-  Axial load in one direction
-  Axial load in two directions
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed